

DEP SFY 2010 Drinking Water Supply Protection Grant Program
RFR # BRP 2009-04
Pelham Watershed and Riparian Corridor Protection Project
Pelham, MA

PROJECT NARRATIVE

(A). Parcel Summary

The 81-acre Adriance property located at 339 Amherst Road in Pelham, Massachusetts, lies approximately 1.5 miles upstream from the Pelham Reservoir System, a network of three reservoirs—the Hill Reservoir, Hawley Reservoir and intake reservoir—that help supply Amherst's drinking water. The Town's *Water Supply Protection Plan* identifies this upstream area including the property as critical to preserve because it is classified as Zones A & C and four streams cross the property as they feed into Dunlop Brook, one of the main tributaries of the reservoirs. The property is currently used for agricultural purposes, with approximately eighteen acres of open, tillable fields along the street frontage to the north. The remainder of the parcel to the south is comprised of forested wetlands and a mixture of upland deciduous and evergreen forest. The current owner is eager to sell the property, and if it cannot be acquired for watershed protection, is strongly considering subdividing the frontage into 2-3 house lots that would use on-site septic systems. The high water table and a lack of public infrastructure (water and sewer) in this area of Pelham, in addition to its location within the upper reaches of the watershed of the Pelham Reservoir System, makes preserving this parcel a high priority to help maintain the water quality entering Amherst's drinking water supply.

(B). Public Open Space

Sixteen acres of open field and the area with the main structure and barns to the north along Amherst Road will be excluded from this project as a separate parcel, and the Town of Amherst has been working with conservation-minded buyers to facilitate a partnership so that future land uses do not impact the water quality of the tributaries crossing the property. A fifteen foot wide right of way easement along the western edge will provide access to the backlands for land management by the Town of Amherst. Amherst watershed lands, whether in-town or in neighboring communities, are managed to maintain water quality through selective forestry and timber harvesting, with the incidental benefit of providing wildlife habitat and informal areas to recreate. Motorized vehicles and all formal recreation areas such as trails and playing fields are prohibited on watershed lands. The only exception is the well-traveled and historic route of the Metacomet & Monadnock (M&M) Trail that passes 1.2 miles west of the Adriance property as it crosses through the Pelham Reservoir System watershed. Watershed lands are considered restricted open space and allow only informal passive recreation such as walking, bird watching and hunting is allowed on watershed land. Local, informal trails within Pelham connect to the M&M Trail, but do not enter onto the property. The Town of Amherst will try to prevent trails from developing on the property by restricting access with perimeter "No Trespassing" signs, gated entries along the access road(s), partnerships with the Pelham Police Department, and weekly windshield inspections with semiannual site visits. These measures have been used successfully to maintain the nearly 2,600 acres of forested watershed land the Town owns in Shutesbury and Pelham.

(C). Protection of Vulnerable Area

The acquisition of this property to protect Amherst's drinking water supply will benefit an area with a high water table, multiple stream crossings, and various wetlands. The Source Water Protection Plan

also notes that turbidity is a common problem in the Pelham Reservoir System watershed due to steep slopes and soil types. This is also a small watershed with short flow times that results in spikes in bacteria levels in the reservoir system after storm events. The Town does have a 10-year forestry management plan for its watershed lands to help maintain soil quality, prevent erosion, limit spread of invasive species, and preserve tree canopy with the goal of safeguarding the high water quality entering Amherst's drinking water supply. By managing the timber on the property to maintain water quality, sensitive ecological areas and the medium-yield aquifer located near the reservoirs will be protected from future development and agricultural uses. The Adriance property is also located within the Outstanding Resource Waters datalayer from MassGIS, indicating it is important to protect to maintain water quality.

(D). Natural Resource Benefits

Located in the Pelham Hills, just west of the ridge separating the Connecticut River Basin and the Quabbin Reservoir Basin, the Adriance property is surrounded by valuable natural resources—biomap core and supporting habitat are adjacent to the property to the east, south and west. Approximately a dozen certified vernal pools have been identified in the general area downstream from the property, and the presence of six potential vernal pools within a 1/3 of mile of the parcel indicates a strong likelihood that more of these unique features are located within and around the Adriance property. Also located downstream near the Pelham Reservoir System are areas designated as NHESP Priority Habitat for Rare Species.

Much of the property is located within the Living Waters Critical Supporting Watersheds datalayer, demonstrating that this parcel is important to protect not only for water quality, but wildlife habitat. The datalayer explains that the area is under medium threat from impervious surfaces, road density, road crossing and agricultural uses. There is a low potential threat level from point sources of pollution.

(E). Protection Plans

The Town's Public Water Supply-Protection Plan, a combination of the surface water supply and groundwater supply protection plans, states its goal as the preservation of lands, specifically areas in Zones A & B and Zones I & II that contribute to the high quality drinking water for the Town of Amherst. Protecting water quality can be achieved with the "the direct purchase of land by the Town of Amherst" (section 5.2.1, the Plan), conservation restrictions and easements. Secondary measures through regulatory control such as zoning may also be necessary, although with much of the watershed land outside of Amherst these strategies cannot be used.

The Plan explains that on-site septic, agricultural uses (including animal husbandry and pasture land) and low-density frontage lot development are potential threats to the water quality entering the Pelham Reservoir System, and notes that the heaviest development in Pelham occurs on Amherst and Packardville Roads. All the potential threats are very real possibilities on the Adriance Property. Located on Amherst Road, the open land of the property is ideal for pasturing farm animals as well as low-density single family homes that would use on-site septic treatment. Such scenarios could impact water quality of the Pelham Reservoir System because of the four tributaries that cross the property.

The Amherst Master Plan and recently approved Open Space and Recreation Plan (OSRP) support the acquisition of private property to help protect drinking water quality. The OSRP even states as one of its six major goals that land preservation efforts should focus in areas

identified as priority habitat, containing valuable natural resources, prime agricultural soils, watershed lands that supply Amherst's drinking water, and areas with large contiguous blocks of undeveloped open space. The Conservation Commission has also determined that one of Amherst's most urgent resource protection needs is to acquire property for the protection of wetlands, the Town's drinking water supply, and to provide areas for the flood storage:

"The Commission endorses cooperation and assistance with neighboring towns, acquisition of private property, conservation restrictions, and implementation of forestry management plans to maintain the ecological integrity of land surrounding Amherst's surface water supplies" (pg. 61, OSRP).

(F). Partnerships

The Kestrel Trust is working cooperatively with the Town of Amherst to identify an overall conservation strategy for this property. The Trust shared the initial expense of the appraisal and continues to consider financial support for this water supply protection effort.

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PROJECT EXPENSES & TIMELINE

Summary

The 83-acre Adriance property in Pelham, Massachusetts, lies in the upper watershed that provides a significant amount of drinking water to Amherst, and has a number of perennial streams that cross the back portion of the property. The parcel has been appraised by O'Connor Real Estate Associates, Inc. on August 11, 2009 at a value of \$155,000. This amount reflects the exclusion of approximately 16 acres of tillable land along the road frontage that also includes all the structures—house and barns—on the property.

Project Expenses and Funding

Appraisal	\$ 4,500.00
Legal Fees (title search, etc.)	\$ 5,000.00
Recording Fees (surveys, plans, maps, etc.)	\$ 5,500.00
Purchase Costs (appraised value)	<u>\$ 155,000.00</u>
 Total Eligible Project Cost	 \$ 170,000.00
 Reimbursement Request	 \$ 85,000.00

Project Timeline

~ Discussions with Landowner and potential buyers	May 2009-Current
~ Town Meeting vote authorizing expenditures	Sept/Oct 2009
~ Estimated purchase date	Nov/Dec 2009

**MassDEP Water Supply
Protection Program:
Pelham Watershed and
Riparian Corridor
Protection Project**

Town of Amherst



www.amherst.edu

**Attachment J1:
Protected Open Space**

- Adriance Property
Proposed Acquisition-05 Acres
Exclusion-16 Acres

- Major Trails
K.C.
Robert
Norwa
M&M T

Massachusetts Protected Open Space

- OpenSpace: Interest Overlay
Conservation Restriction
CR/APR Combination
OpenSpace: Lands

- Commonwealth of Massachusetts
DCG-Water Supply Protection

- Land Trust

Municipal

- ☐ Non-profit
☐ Private

- ### Permanently Pr

- Town Conservation Areas
Private Land Trusts

- APR Land
Recreation Areas & Schools

Land protection status based upon Town of Amherst
Tax Assessor's Database and MassGIS as of July 2009.

Horizontal Datum: MA Stateplane Coordinate System,
Zone 43b1 Datum NAD83 Feet

Platinum 90 base map features compiled at 1"=40'

Aerial Photography: April, 2004.
Parcel's compiled through a "test-fit" methodology to
and 1-100-000 scale from April, 2004 aerial photography.

